



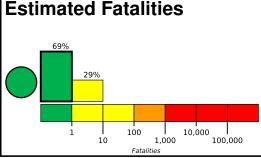


## **PAGER** Version 5

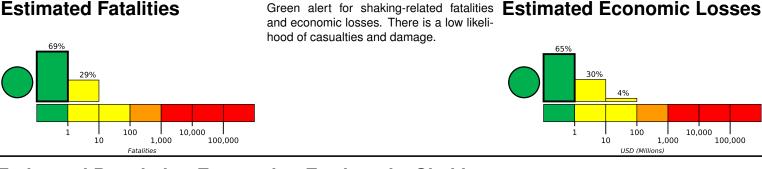
Created: 4 hours, 1 minute after earthquake

# **M 4.4, 14 km S of Fern Forest, Hawaii** Origin Time: 2020-12-21 08:36:27 UTC (Sun 22:36:27 local) Location: 19.3370° N 155.1118° W Depth: 6.3 km

**Estimated Fatalities** 69% 10,000 1,000



and economic losses. There is a low likelihood of casualties and damage.



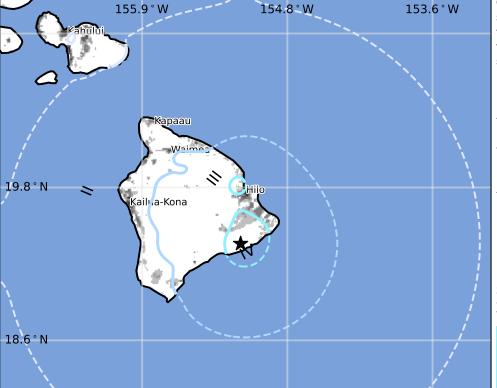
Estimated Population Exposed to Earthquake Shaking

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ESTIMATED POPULATION EXPOSURE (k=x1000)		109k*	204k	37k	0	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	11-111	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

<sup>\*</sup>Estimated exposure only includes population within the map area.

## Population Exposure

population per 1 sq. km from Landscan 5000 10000



# **Structures**

Overall, the population in this region resides in structures that are resistant to earthquake shaking, though vulnerable structures exist. The predominant vulnerable building types are unreinforced brick masonry and reinforced masonry construction.

### **Historical Earthquakes**

Date	Dist.	Mag.	Max	Shaking
(UTC)	(km)		MMI(#)	Deaths
1973-04-26	68	6.2	VII(74k)	0
2006-10-15	108	6.7	VIII(15k)	0
1975-11-29	15	7.2	IX(30k)	2

Recent earthquakes in this area have caused secondary hazards such as landslides that might have contributed to losses.

#### Selected City Exposure

MMI	City	Population
IV	Papa'ikou	1k
IV	Mountain View	4k
IV	Wainaku	1k
IV	Fern Acres	2k
IV	Ainaloa	3k
IV	Hawaiian Acres	3k
IV	Hilo	43k
II	Kailua-Kona	12k
II	Kahului	26k
II	Kihei	21k
I	Wailuku	15k

bold cities appear on map.

(k = x1000)

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.

https://earthquake.usgs.gov/earthquakes/eventpage/hv72294777#pager